

AMENDMENTS TO THE CLAIMS

Claims 1-8 (Cancelled).

9. (Previously Presented) The device of claim 16 wherein the first trigger region adjoins the semiconductor material; and the second trigger region adjoins the semiconductor material.

Claims 10-12 (Cancelled).

13. (Previously Presented) The device of claim 16 wherein during a first ESD event, a first potential on the first and second contact regions is greater than a second potential on the third and fourth contact regions.

14. (Currently Amended) The device of claim 13 wherein during a second ESD event, a third potential on the third and fourth contact regions is greater than a fourth potential on the first and second contact ~~structures~~ regions.

15. (Previously Presented) The device of claim 16 wherein the semiconductor material has a top surface;
the first well has a side surface that contacts the top surface, and a bottom surface that contacts the side surface; and
the first trigger region is spaced apart from the bottom surface.

16. (Previously Presented) A device formed in a semiconductor material of a first conductivity type, the semiconductor material having a surface, the device comprising:

- a first well of a second conductivity type formed in the semiconductor material, the first well having a dopant concentration;

- a second well of the second conductivity type formed in the semiconductor material, the second well having a dopant concentration and being spaced apart from the first well;

- a first contact region of the first conductivity type formed in the first well;

- a second contact region of the second conductivity type formed in the first well, the second contact region being electrically connected to the first contact region to have a same potential;

- a first trigger region of the second conductivity type formed in the first well, the first trigger region being spaced apart from the first and second contact regions;

- a third contact region of the first conductivity type formed in the second well;

- a fourth contact region of the second conductivity type formed in the second well, the fourth contact region being electrically connected to the third contact region to have a same potential;

- a second trigger region of the second conductivity type formed in the second well, the second trigger region being spaced apart from the third and fourth contact regions;

- a separation region of the semiconductor material located only between the first and second trigger regions, the separation region contacting the surface, the first trigger region, and the second trigger region; and

- a device region that overlies and contacts the surface at a location where the separation region contacts the surface between the first and second trigger regions, the device region at the location being free of a gate, and not lying below a gate.

17. (Previously Presented) The device of claim 16 wherein the first and second trigger regions are formed on opposite sides of the separation region.

18. (Previously Presented) The device of claim 16 wherein the first trigger region has a dopant concentration greater than the dopant concentration of the first well; and the second trigger region has a dopant concentration greater than the dopant concentration of the second well.

19. (Cancelled)

20. (Previously Presented) The device of claim 16 wherein the first trigger region is not directly electrically connected to the third contact region, and the second trigger region is not directly electrically connected to the first contact region.

21. (Cancelled).

22. (New) The device of claim 16 wherein the separation region has only the first conductivity type.

23. (New) A device comprising:
a first well of a first conductivity type, the first well having a top surface;
a first connection region of the first conductivity type that contacts the first well;
a second connection region of a second conductivity type that contacts the first well, the second connection region being electrically connected to the first connection region to have a same potential;

a first trigger region of the first conductivity type that contacts the first well along a first interface, the first trigger region being spaced apart from the first and second connection regions, a dopant concentration of the first trigger region adjacent to the first interface being substantially greater than a dopant concentration of the first well;

a second well of the first conductivity type, the second well having a top surface;

a third connection region of the first conductivity type that contacts the second well;

a fourth connection region of the second conductivity type that contacts the second well, the fourth connection region being electrically connected to the third connection region to have a same potential;

a second trigger region of the first conductivity type that contacts the second well along a second interface, the second trigger region being spaced apart from the third and fourth connection regions, and from the first trigger region, a dopant concentration of the second trigger region adjacent to the second interface being substantially greater than a dopant concentration of the second well;

a semiconductor region that contacts the first trigger region and the second trigger region, the semiconductor region having a top surface that lies in a common plane with the top surfaces of the first and second wells; and

a device region that overlies and contacts only the top surface of the semiconductor region between the first and second trigger regions, the device region being free of a gate, and not lying below a gate.

24. (New) The device of claim 23 wherein no region of the first conductivity type lies between any part of the first and second trigger regions.

25. (New) The device of claim 23 wherein during a first ESD event, a first potential on the first and second connection regions is greater than a second potential on the third and fourth connection regions.

26. (New) The device of claim 25 wherein during a second ESD event, a third potential on the third and fourth connection regions is greater than a fourth potential on the first and second connection regions.

27. (New) The device of claim 23 wherein the first trigger region contacts the semiconductor region along a third interface, a dopant concentration of the first trigger region adjacent to the third interface being substantially equal to the dopant concentration of the first trigger region adjacent to the first interface.

28. (New) The device of claim 27 wherein the second trigger region contacts the semiconductor region along a fourth interface, a dopant concentration of the second trigger region adjacent to the fourth interface being substantially equal to the dopant concentration of the second trigger region adjacent to the second interface.

29. (New) The device of claim 23 wherein the first trigger region is not directly electrically connected to the third connection region, and the second trigger region is not directly electrically connected to the first connection region.

30. (New) The device of claim 23 wherein:
the first trigger region is spaced apart from a bottom surface of the first well;
and
the second trigger region is spaced apart from a bottom surface of the second well.